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09/830,918	08/13/2001	Claudia Panzer	H-3630-PCT/U	5279

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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 15

Application Number: 09/830,918
Filing Date: August 13, 2001
Appellant(s): PANZER ET AL.

Aaron R. Ettelman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 23, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Claims 8-27 stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

WO 96/16991	Wachter et al.	06-1996
US 5,547,988	Yu et al.	08-1996
US 5,690,924	Keil et al.	11-1997

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachter et al. (WO 96/16991), Yu et al. (5,547,988), and Keil et al. (5,690,924). This rejection is set forth in the prior Office Action mailed November 19, 2002 in Paper No. 9.

(11) Response to Argument

Claim Rejections - 35 USC § 103 Maintained

Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachter et al. (WO 96/16991), Yu et al. (5,547,988), and Keil et al. (5,690,924) for reasons of record stated in the prior Office Action mailed November 19, 2002 in Paper No. 9.

The broadest claim in the instant application is drawn to a cosmetic preparation comprising (a) ethanol in an amount of from 70 to 90% by weight; and (b) a

neutralization product of a chitosan and the particular acid herein, wherein the neutralization product is present in an amount of from 0.01 to 5% by wieght.

It is the examiner's position that the present invention is obvious in view of the prior art of record, as discussed below.

As indicated in the prior Office Action, Wachter et al. discloses that a chitosan having an average molecular weight within the instant claim, having a degree of deacetylation within the instant claim, and having a Brookfield viscosity within the instant claim, in an amount 0.3% by weight (within the instant claim) is useful in cosmetic compositions such as skin-care, hair-care, hair-repair, and wound-healing. See US 5,962,663 equiv to WO 96/16991: abstract, col.1, col.2 lines 49-60, and col.4 lines 44-47. Wachter et al. further discloses the compositions therein also comprising carboxylic acids and ethanol in 10-15% (see col.4 line 61 and col. 10 Table 2).

Yu et al. discloses the topical compositions for alleviating signs of dermatological aging – skin, nail and hair changes, comprising 2-hydroxycarboxylic acids such as DL-lactic acid (5 %), chitosan (0.3 g), and ethanol (40%). See abstract and col.10 lines 61-67 in Example 2.

Keil et al. discloses the hair treatment composition comprising a deacetylated (75-90%) chitosan having an average molecular weight within the instant claim, 2-pyrrolidone carboxylic acid, and lower alcohols such as ethanol (40-50%) and isopropanol in water-alcoholic media. See abstract, col.4 lines 4-11, and Example 1, 2, 5 and 9 in col.5-7. Keil et al. also discloses the hair treatment composition with one propellant gas useful in a spraying composition (see col.4 lines 39-62).

The prior art does not expressly disclose the employment of the particular amount (70-90% by weight) of ethanol in the cosmetic compositions of Wachter, Yu, and Keil comprising the same deacetylated chitosan and carboxylic acids for skin-care, hair-care, hair-repair, and wound-healing. The prior art does also not expressly disclose the employment of hydroxyisobutyric acid in the cosmetic compositions therein.

As discussed in the prior Office Action, one having ordinary skill in the art at the time the invention was made would have been motivated to employ the particular amount (70-90% by weight) of ethanol in the cosmetic compositions for skin-care, hair-care, hair-repair, and wound-healing in Wachter, Yu, and Keil since ethanol in 10-15% or 40-50% is known to be useful in the cosmetic compositions comprising the active ingredients, deacetylated chitosan and carboxylic acids, for skin-care, hair-care, and hair-repair based on the prior art. Therefore, one of ordinary skill in the art would have been motivated to optimize the amounts of ethanol to 70-90% by weight in the composition because the optimization of amounts of ethanol or isopropanol is considered well within the conventional skill of artisan, involving merely routine skill in the art, by merely replacing some of water in the known compositions with more ethanol or isopropanol.

Moreover, hydroxycarboxylic acids such as DL-lactic acid are well known to be useful in cosmetic skin-care compositions. Therefore, one of ordinary skill in the art would have reasonably expected that the particular hydroxycarboxylic acid, hydroxyisobutyric acid (a homolog of lactic acid), would have same usefulness as any other hydroxycarboxylic acids such as lactic acid in cosmetic composition for skin

care/hair care. Note that it has been settled that the addition of CH3 groups to a known compound is not patentable and prima facie obvious. See *In re Wood*, 199 USPQ 137.

Appellant's primary argument is that that the Examiner has failed to established a prima facie case upon the cited references since the Examiner fail to show three criteria for a prima facie case (see Appellant's Brief on Appeal at page 6-7) as discussed below.

Appellant's argument in respect to the cited references, i.e., Wachter et al. "hardly qualifies as teaching neutralization of products of chitosan and carboxylic acids", Yu's teachings "not a salt and not a neutralization product" (see Appellant's Brief on Appeal at page 7 "D") have been fully considered but are not deemed persuasive as to the nonobviousness of the claimed invention over the prior art, since it is well known in general chemistry, a base such as a chitosan having amino groups (see the structure of chitosan in the instant specification, page 2 lines 25-30) will automatically react with or be neutralized by a acid such as acids taught in the cited prior art to form a chitosan salt – a neutralization product when a base meets a acid in a composition. Hence, a chitosan salt – a neutralization product is inherently present in the compositions of Wachter et al. and Yu et al. Moreover, it is noted that Appellant admits that Keil teaches a chitosan salt.

Appellant's argument regarding the amount of ethanol, 70-90% by weight, not specifically taught by the cited prior art and no motivation for increasing the amount of ethanol in the cited prior art have been fully considered but are not deemed persuasive as to the nonobviousness of the claimed invention over the prior art.

As discussed in the prior Office Action, since chitosan cosmetic compositions comprising ethanol in an amount of 40-50% by weight are known in the art, the optimization of amounts of ethanol from 40-50% to 70-90% (a well known solvent in a cosmetic composition) is considered conventional in cosmetic science, well within the skill of artisan and involving merely routine skill in the art, by merely replacing some water in the known composition with more ethanol or isopropanol. Moreover, Keil discloses that ethanol (i.e., 40-50%) or isopropanol employed in water-alcoholic media therein in which the total amounts of ethanol or isopropanol and water in the compositions is more than 90% (see Example 1, 2 and 5). One of ordinary skill in the art would clearly acknowledge that ethanol or isopropanol are water-like solvent, being miscible with water. Replacing some of water with ethanol or isopropanol is considered be conventional in the art.

More importantly, Appellant's arguments regarding the claimed significantly improved results (see Appellant's Brief on Appeal at page 10) in Appellant's testing result in the specification at page 13 lines 1-5 have been fully considered with respect to the nonobviousness and/or unexpected results of the claimed invention over the prior art but are not deemed persuasive for the reasons below.

It is noted that the result on the test of a single composition comprising chitosan glycolate which is not within the instant claimed neutralization product of the particular acid and chitosan since glycolate is not the instant particular acid in the claim. Thus, this result does not represent the instant claimed invention. Even so, the evidence in a single example is not commensurate in scope with the claimed invention and does not

demonstrate criticality of a claimed range of the ingredients and their amounts in the claimed composition. See MPEP § 716.02(d).

Further, the specification provides no side-by-side comparison with the closest prior art in support of nonobviousness for the instant claimed invention over the prior art.

Therefore, the evidence presented in specification herein is not seen to be clear and convincing in support the nonobviousness of the instant claimed invention over the prior art.

Therefore, the claimed invention is clearly obvious in view of the prior art and the three criteria for a prima facie case in Appellant's arguments are met for the instant case based on above discussion.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

S. A. Jiang, Ph.D.
October 17, 2003

Conferees T.J. Criares

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